

Z/037/63/000/002/004/004
E073/E335

AUTHOR: Kunzlová, Ivana

TITLE: Preparation of non-hydrolyzed NaCl and KCl crystals
by drawing from the melt

PERIODICAL: Československý časopis pro fyziku, no. 2, 1963,
137 - 140

TEXT: Stockbarger (Disc. Far. Soc. 5, 1949, 299) suppressed hydrolysis of LiF and CaF_2 crystals by growing them in vacuum using the method of lowering the crucible. The author of this paper grew crystals by drawing from the melt, using the same method and similar apparatus to that employed by Fukuda, Okuda and Uchida (J. App. Phys. Japan 27, 1958, 535) for growing LiF crystals. A description is given of the equipment and its operation. NaCl and KCl crystals of up to 3 cm diameter were grown both in vacuum (5 mm Hg residual pressure) and under argon. pH measurements of their aqueous solutions as well as luminescence and emission tests did not reveal hydrolysis. The described method is simple and, with small modifications, the apparatus can be used for growing larger crystals. Compared with the method of

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lowering the crucible, this method has the distinct advantage that, during the process of growth, the crystal can be observed and, if necessary, influenced. There is 1 figure.

ASSOCIATION: Ústav fyziky pevných látek ČSAV, Praha
(Institute of Solid State Physics,
ČSAV, Prague)

SUBMITTED: March 2, 1962

Card 2/2

BOHUN, A.; DOLEJSI, J.; HUML, K.; KANTUREK, J.; KUNZLOVA, I.; LEBL, M.;
TRNKA, J.

Optical and electric occurrences in sodium chloride crystals
activated with copper. Chekhosl fiz zhurnal 13 no.3:211-215
'63.

1. Ustav fyziky pevných látek, Československá akademie věd, Praha.

KUNENETSOV, I.V.

Boring blastholes with compressed-air drills with nozzles.
Trudy IGD (Sverd.) no.8:93-99 '64.

(MIRA 17:10)

KUNZVART, Milos

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: /not given/

Affiliation: /not given/

Source: Prague, Vestnik pro Mineralogii a Beologii, Vol VI, No 2, 1961,
pp 187-196.

Data: "Geology of the Republic of Congo."

GPO 981643

KUOCZOGI, Endre, fomernok

Methods for measuring circular impedance. Villamossag 9 no.9:
257-260 S '61.

1. Orsagos Villamosenergiail Felugyelet.

KVOSA, T. A.

KVOSA, T. A.: "Black Lithuanian cattle and their cultivation in the south-
western portion of the Lithuanian SSR." Min Higher Education USSR.
Lithuanian Agricultural Academy. Inst of Animal Husbandry and Veter-
inary Medicine, Min Agriculture Lithuanian SSR. Vilnius, 1956.
(Dissertation for the Degree of Candidate in Agricultural Science.)

Knizhnaya letopis', No. 30, 1956. Moscow.

KUOSAITTE, B.A.

Regeneration of the mammary gland in guinea pigs. Biul. eksp.
biol. i med. 60 no.11:106-109 N '65. (MIRA 19:1)

1. Laboratoriya fiziologii zhiivotnykh (zav. - doktor biol. nauk
G.A. TSakhayev) Instituta zoologii i parazitologii AN Litovskoy
SSR, Vil'nyus. Submitted February 8, 1965.

KUOSAYTE, B. A., CAND BIO SCI, "EFFECT OF THE FUNCTIONAL
STATE OF THE THYROID GLAND ^{upon} ON THE HISTOPHYSIOLOGICAL ^{part} CHA-
^{Character} ~~RACTERISTICS~~ OF THE MAMMARY GLAND OF GUINEA PIGS." VIL'-
NYUS, 1960. (ACAD SCI LISSR, INST OF EXPERIMENTAL MEDICINE).
(KL, 3-61, 210).

KAZILIUNAS, Romualdas; KUOSAITE, R., red.; PAKERYTE, O., tekhn.
red.

[Fuel gases and their use] Degiosios dujos ir ju panaudo-
jimas. Vilnius, Valstybine ir mokelines literaturos
leidykla, 1962. 199 p. (MIRA 16:12)
(Gas industry)

KUOSMAN, Vil'yam Vil'yamovich; POLISHCHUK, Anatoliy Pavlovich; GILEV, N.Kh.,
red.; PITERMAN, Ye.L., red. idz-va; SHITS, V.P., tekhn. red.

[Universal chain saws] Universal'nye pil'nye tsepi. Moskva, Gos-
lesbumizdat, 1957. 42 p. (MIRA 11:7)
(Chain saws)

X
KUDSMAN, V.V.; POLISHCHUK, A.P.

~~TsNIIM-K6~~ electric saw. Les.prom. 35 no.4:13-14 Ap '57.
(MLRA 10:5)

1. TSentral'nyy nauchno-issledovatel'skiy institut mekhanizatsii
i energetiki.

(Saws)

KUOSMAN, Vil'yan Vil'yamovich, POLISHCHUK, Anatolij Pavlovich, NADBAKI, M.P.,
red.; NIKOLAYEVA, I.I., red.; SHITS, V.P., tekhn.red.

[TsNIIME-K6 electric chain saw] Elektromotornaya pila TsNIIME-K6.
Moskva, Goslesbunizdat, 1958. 53 p. (MIRA 11:8)
(Chain saws)

BRENNER, Ferenc, dr.; KUP, Gyula, dr.; VACZY, Laszlo, dr.

Hyperacute hemolytic anemia with extensive hemoglobinemia related to septic abortion caused by *Clostridium welchii*. Magy. noorv. lap. 26 no.3:148-152 My '63.

1. Sopron Varosi Tanacs Korhaz Szuleszeti Osztalyanak, Verellato Allomasanak es Korbonctani Osztalyanak kozlemenye. (Igazgato: Eper Tivadar dr.).

(*CLOSTRIDIUM PERFRINGENS*) (ABORTION, SEPTIC) (HEMOGLOBINS)
(HEMOGLOBINURIA) (ANEMIA, HEMOLYTIC)

KUPA, Frantisek, inz.; ZIATOHAVEK, Frantisek

Forging of links for flying shears of blooming mills. Hut listy 17
no.12:853-856 D '62.

1. Vitkovické železárny Klementa Gottwalda, Ostrava.

Z/032/61/011/003/002/005
E073/E335

AUTHOR: Kupa, J.

TITLE: High-pressure Feed Pumps

PERIODICAL: Strojirenství, 1961, Vol. 11, No. 3,
pp. 224 - 230

TEXT: The author deals with the demands to be met by single-stage and two-stage feed pumps for pressures up to 200 atm. and with two-stage feed pumps for pressures in excess of 200 atm. for use in power stations, discussing design problems and giving some information on pumps produced by the Sigma Works, Olomouc, with deliveries of up to 600 t/h. A plot, Fig. 1, shows the dependence of the input part of a feed pump (in % of the power of the turbogenerator) as a function of the admission steam pressure, at.abs. Curve A is based on data of Karasik (Ref. 1 - Rudolf: Research Report VÚTT 57 - 04035.3); Curve B has been calculated on the basis of a Mollier diagram for the following steam parameters: 1 at.abs. to 10 at.abs. (wet steam), 10 at.abs. to 20 at.abs. (steam superheated to 350 °C), 20 at.ab. to 50 at.abs. (steam superheated to 450 °C), 50at.ab. to 200 at.abs. (steam

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High-pressure Feed Pumps

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superheated to 500 °C), condenser pressure 0.1 at. abs. Sigma produces series CC_n and CC_v pumps. Series CC_n is designed for maximum pressures of 120 atm. and CC_v for operating pressures of 200 atm; both pumps are designed for water temperatures up to 220 °C. Series CC_n has an operating range between 38 and 380 m³/h. Series CC_v has an operating range from 100 - 600 m³/h and the normal speed is 3 000 r.p.m. Fig. 2 shows a cross-sectional drawing of a pump of the CC_v series. The impellers are made of cast alloy steel containing 14-15% Cr. Fig. 4 shows a pump of special design, type 50-KHE, intended for a mobile "power-station train". It was important to reduce the dimensions of this to a minimum: delivery $Q = 20$ t/h for a pressure of $H = 542$ m of water col.; feedwater temperature 105 °C; $n = 6\ 700$ r.p.m. Fig. 5 shows an enclosed feed pump, type CC_k 125/12; the entire

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stator is built into a massive cast-steel housing so that the necessity for using long bolts is eliminated; this design enables starting from the cold state and it permits certain temperature variations in the feedwater. For pressures above 200 - 250 atm., the author considers it preferable to use two pump stages with a driving motor in the middle. The high-pressure side can also be driven at a higher speed using, for instance, a hydraulic coupling. The influence of the hydraulic coupling on the efficiency is analysed. The author also investigated the effect of the feedwater temperature fluctuations, the effect of excessively low flow rates and the means of preventing steam generation in the impeller. In the case of pumping from an open vessel which is at atmospheric pressure the static suction height at the cavitation limit is given by the equation:

$$H_{gs} = H_a - H_p - \Delta h_{cr} - h_{loss} \quad (6)$$

(all units in m of water column),

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where H_a - atmospheric pressure,
 H_p - vapour tension of the saturated steam,
 Δh_{cr} - necessary minimum total pressure on the
suction side above the pressure of the
saturated vapours at the cavitation limit,
 h_{loss} - resistance in the piping.

Feed pumps deliver into closed vessels and for these the
pressure H_a has to be substituted by the pressure that
exists at the level where pumping is done. This usually
equals the pressure at the given temperature and as a result
of this the above equation can be written as follows:

$$-H_{gs} = \Delta h_{cr} + h_{loss} \quad (7) ,$$

which means that the pump must have a negative suction
height $h \geq -H_{gs}$ and if pumping is to take place, then:

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$$h \geq \Delta h_{cr} + h_{loss} \quad (8) .$$

The values of Δh_{cr} depend mainly on the delivery rate, on the r.p.m. and on the solution of the inlet part of the impeller. It can be determined most reliably on the test bench by so-called cavitation tests. The calculation derived by Panuška (Ref. 3 - Numerical Determination of the Suction Performance from the Impeller Dimensions Lecture) gives reliable results which have been verified by numerous practical tests. He proposed the following formula:

$$\Delta h_{cr} = \frac{u_1^2 c_{ml}}{2g} + \frac{c_{ml}^2}{2g} \quad (9)$$

where u_1 is the circumferential speed at the inflow edge of the blading, m/s,
 c_{ml} is the real meridial speed at the inlet side of the impeller, m/s.

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This equation can be used in the range of optimum efficiency. Although Δh_{cr} does not depend on the specific weight of the feedwater, the temperature of the feedwater cannot be disregarded. In order to have a sufficient reserve it is necessary that:

$$h = \Delta h_{cr} (1.15 \text{ to } 1.2) \Delta h_{loss} .$$

There are 10 figures and 4 references: 3 Czech and 1 non-Czech.

ASSOCIATION: Sigma Olomouc, n.p., závod Lutín
(Sigma Olomouc, Lutin Plant)

Card 6/10

KUPA, J.

Feed pump control by a hydraulic clutch. Strojirenstvi
14 no. 3: 163-168 Mr '64.

1. Sigma Olomouc.

KUPA, V. (Odessa); GRIGOR'YEV, I. (Odessa)

Key to knowledge. Grazhd. av. 22 no.12:6-7 D '65.

(MIRA 18:12)

1. Rukovoditel' filiala ekonomicheskogo fakul'teta pri vechernem universitete marksizma-leninizma v Odesskom aeroportu (for Grigor'yev).

KUPA, V.V., inzhener

~~SECRET~~
Preparation of K-17 glue using oxalic acid in powder form instead of a water solution. Der.prom.4 no.8:26 Ag '55. (MIRA 8:10)

1. Zaveduyushchiy laboratoriyey arteli "Volya"
(Glue)

KUTANOV, N. YE.

Technology

(Gas management in metallurgical plants). Moskva, Metallurgizdat, 1951.

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.

KESANS, A.; KUPAKS, Ye.

Barium hexaborate. Kin. Inst. Zinatnisk, Raksti, Latvijas PSR Zinatnu
Akad. 1, 62-67 '50.
(CA 47 no.19:9835 '53)

1. KESANS, A. : KUPAKS, V. : VIMBA, S.

2. USSR (600)

4. Barium perborate

7. Barium perborate. Latv. PSR Zin. Akad Vestis 3, 1951

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

SOV/84-58-10-8/54

AUTHOR: Kupalo, V.

TITLE: New Crews Go in Service (Vvodim v stroy novyye ekipazhi)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 10, p 6 (USSR)

ABSTRACT: The author reports that the personnel of his unit has serviced three regular air routes on the Moscow-Novosibirsk run since the spring of 1958, overfulfilling the plan for 8 months. New crews are now being added to the unit.

Card 1/1

KUPALO, V. (Novosibirsk)

Love at first sight. Grazhd.av. 18 no.10:15 0 '61. (MIRA 15:5)
(Jet planes)

KUPALOVA, I.K.

Effect of cobalt on the structure and properties of high speed steel.
Metalloved. i term.obr.met. no.9:49-53 S '65.

(MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut.

KUPALOV, P.A.

Localization of functions in the animal brain in relation
to the analysis of conditioned reflex activity. Zhur. nevr.
i psikh. 64 no.1:18-26 '64. (MIRA 17:5)

1. Institut eksperimental'noy meditsiny AMN SSSR, Leningrad.

BIRYUKOV, Dmitriy Andreyevich, prof., otv. red.; GOLIKOV, N.V., red.;
ZIMKIN, N.V., red.; KARAMYAN, A.I., red.; KUPALOV, P.S., red.;
LAPINA, I.A., red.; VASIL'YEVA, Z.A., red.; KHARASH, G.A., tekhn.
red.

[Problems of the physiology and pathology of higher nervous activity]
Problemy fizologii i patologii vysshei nervnoi deiatel'nosti.
Pod obshchei red. D.A.Biriukova. Leningrad, Medgiz. No.2. 1963.
192 p. (MIRA 16:12)

1. Akademiya meditsinskikh nauk SSSR, Moscow. 2. Deystvitel'nyy
chlen AMN SSSR (for Biryukov).
(NERVOUS SYSTEM)

1964*

KUPALOV, P.S. [deceased]; LAPINA, I.A.

Content of sialic acid in lacrimal and salivary secretions in dogs during conditioned and unconditioned stimulations. Zhur. vys. nerv. deiat. 15 no.2:311-317 Mr-Ap '65.

(MIRA 18:5)

1. Fiziologicheskii otdel imeni I.P. Pavlova Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad.

All 1964 deceased Berlin file

KUPALOV-YAROPOL, I., referent.

Determining elevations at automobile speeds (From: Oil and Gas
Journal Ap 1947). Novneft.tekh.:Geol. no.4:7 '48. (MLRA 9:5)
(Altitudes--Measurement)

1. KUPALOV-YAROPOLK, I.K.

2. USSR (600)

"The Practice of Employing Elongate Hodographs of Reflected Waves." Prikladnaya geofizika, Issue 4, 1948 (109-117)

9. Meteorologiya i Gidrologiya, No. 3, 1949.
Report U-2551, 30 Oct 52.

KUPALOV-YAROPOLK, L. D.

REZNIK, A.M. (brigadir), AREST, V.I., BLOKH, I.M., KIKGOF, Yu.A.,
ZAGARMISTR, A.M., KUPALOV-YAROPOLK, I.K., PETROV, I.V., TYABIN, V.Ye.,
FEDORENKO, A.N., sostaviteli; DYUKOV, A.I., KLESHCHEV, A.I., redaktory.

[All-Union unified norms for geophysical field work] Vsesoiuznye
edinye normy vyrabotki na polevye geofizicheskie raboty. [Sostavi-
teli: Reznik A.M. i dr. Redaktory: A.I.Dyukov, A.I.Kleshchev] Mo-
skva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry,
1951. 146 p.

(MLRA 7:4)
(Geophysics)

KUPALOV-YAROPOLK

USSR/Geophysics - Prospecting Sep/Oct 53
"Review of Symposium 'Prospecting and Industrial
Geophysics,'" (A. G. Ivanov, reviewer)

Iz Ak Nauk SSSR, Ser Geofiz, No 5, pp 474-476

Favorably reviews the symposium, edited by V. V. Fedynskiy, entitled "Razvedochnaya i promyshlennaya geofizika", No 4, Min Petro Ind USSR, Glavneftgeofizika, Moscow, 1952, 600 copies, price 1.50 rubles. Contributors were: I. K.

Kupalov-Yaropolk, G. V. Bereza, A. I. Slutskovskiy, B. S. Temkina, P. I. Lukavchenko,

26TT82

O. A. Shvank, N. A. Per'kov, S. G. Komarov,
I. Ye. Eydman, L. M. Yesel'son, and E. E.
Fotladi.

FD-1795

USSR/Geophysics - Seismic prospecting
Kupalov-Yaropolk, I.
Card 1/1 Pub 45-17/18

Author : Kupalov-Yaropolk, I.

Title : Methodological conference on seismic prospecting on the Russian platform

Periodical : Izv. AN SSSR, Ser. geofiz. 290-293, May-Jun 1955

Abstract : From 11 to 15 January 1955 in Saratov was held a conference of seismic prospectors who operate within the limits of the Russian platform, which was called by the "Main Oil Geophysics" of the Ministry of Petroleum Industry. Participants were members of Geophysical Institute, Leningrad, Moscow, and Saratov State Universities, and oil-gas organizations in Saratovskaya Oblast'. Reports were heard from the Scientific-Research Institute of Geophysical Methods of Prospecting on procedural methods. Heard were: I. S. Berzon (Dr. Phys. -Math. Sci.; Geophysical Institute); Ye. I. Gal'perin; K. I. Ogurtsov and A. P. Volin (Leningrad State Univ.); A. M. Yepinat'yev (Cand. Phys. -Math. Sci.; Geophysical Institute).

Institution: --

Submitted : --

KUZNETSOVA, N.P.; KUPALOV-YAROPOLK, I.K.

Interpretation of seismic data in the Ural-Emba petroleum-bearing
region. Razved.i prem.geofiz. no.13:16-27 '55. (MLRA 9:7)
(Ural Valley--Prospecting--Geophysical methods) (Emba Valley--
Prospecting--Geophysical methods)

KUPALOW-JAROPOLK, I.

Poland/Physics of the Earth - Geophysical Prospecting, 0-5

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36443

Author: Kupalow-Jaropolk, I.

Institution: None

Title: Conference on Methods of Seismic Prospecting of the Russian Platform

Original

Periodical: Przegl. geol., 1956, No 1, 28-39; Polish

Abstract: Report on a methods conference on seismic prospecting (see Referat Zhur - Fizika, 1956, 27612).

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KUPALOV-YAROPOLK, I. K.

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4,
p 169 (USSR) 15-57-4-5270

AUTHOR: Kupalov-Yaropolk, I. K.

TITLE: Geophysical Method of Prospecting for Oil in Foreign
Countries (Selected From Foreign Literature) (Geofizi-
cheskiye metody razvedki na neft' za rubezhom)

PERIODICAL: Prikl. geofizika, Nr 14, 1956, pp 214-233.

ABSTRACT: In foreign countries, seismic, gravimetric, and magnetic
methods are most widely used; electrical methods are
hardly used at all. Magnetic methods are used for
reconnaissance surveys conducted from an airplane with a
high-sensitivity T-magnetometer. The observations are
made along a system of parallel profiles separated by
1.5 km to 2.0 km. Data from magnetic surveys are gener-
ally interpreted in conjunction with gravimetric studies.
Gravimetric prospecting is effected by gravimeters that
have a precision of measurement of 0.1 to 0.01 mgal.
For detailed surveys, in order to secure a precision of

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Geophysical Method of Prospecting for Oil (Cont.)

determination on the order of 0.01 to 0.02 mgal, the null point on the gravimeter is verified every two hours, and from the calculations obtained in this process the effect of solar and lunar tides is eliminated. New procedures of interpretation have been developed; these related to the second derivative of the vertical component of gravity and to the construction of maps of dG/dz . Reflection methods are the most widely used for the seismic techniques. Observations are made along a system of continuous profiles with one shot point. More complex techniques of shooting are also used. Multiple explosions are used and the geophones are grouped with a number of seismographs arranged in groups from 5 to 48 to record the oscillations on a magnetic tape. The author describes briefly the application in foreign countries of techniques for treating field seismic data, methods of making seismic logs and of conducting marine seismic surveys, and the peculiar problems of doing seismic work under severe climatic conditions.

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V. M. G.

PHASE I BOOK EXPLOITATION 812

Kupalov-Yaropolk, Igor' Konstantinovich

Vzryvnyye raboty pri seysmicheskoy razvedke (Blasting Operations in Seismic Prospecting) Moscow, Gostoptekhzdat, 1958. 145 p.
. 2,500 copies printed.

Ed.: Dobrynina, N. P.; Tech. Ed.: Mukhina, E. A.

PURPOSE: This is a manual for technicians conducting blasting operations in seismic exploration.

COVERAGE: In discussing the subject of blasting as applied to seismic prospecting the author provides background information on geology and geophysical exploration methods and supplies detailed

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Blasting Operations in Seismic Prospecting 812

information on explosives, their properties, use, storage, transportation, inventory, and disposal. Operational organization, the establishment of work norms and wages are also described. The Appendix contains 5 sample forms for keeping a record of materials and operations. The text is accompanied by 32 diagrams, some of them photographs of equipment. No personalities are mentioned. There are no references.

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AVAILABLE: Library of Congress (TN269.K77)

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12-9-58

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KUPALOV-YAROPOLK, I. K.

SERGEYEV, A.A., red.; ANPILOGOV, I.M., red.; ASSONOV, V.A., red.; BABAYANTS, H.A., red.; BABOKIN, I.A., red.; BALAMUTOV, A.D., red.; BOGORODSKIY, N.N., red.; BOLOHENKO, D.N., red.; BUCHNEV, V.K., red.; VAKHMINTSEV, G.S., red.; VORONKOV, A.K., red.; GARKALENKO, K.I., red.; GORBATOV, P.Ye., red.; GOLOVLEV, V.Ya., red.; DOKUCHAYEV, M.M., red.; DUBNOV, L.V., red.; YEVTHEYEV, A.D., red.; YEREMENKO, Ye.K., red.; ZENIN, N.I., red.; KRIVONOGOV, K.K., red.; KUPALOV-YAROPOLK, I.K., red.; MATSYUK, V.G., red.; NIKOLAYEV, S.I., red.; ONISHCHUK, K.N., red.; PETROV, K.P., red.; PILYUGIN, B.A., red.; PLATONOVA, A.A., red.; POLESIN, Ya.L., red.; POKROVSKIY, L.A., red.; POMETUN, D.Ye., red.; POLYUSHKIN, A.Kh., red.; REYKHER, V.P., red.; SEDOV, N.A., red.; SIDORENKO, I.T., red.; FIDELEV, A.A., red.; CHAKHMAKHCHEV, A.G., red.; CHEMODUROV, M.Ya., red.; SHUMAKOV, A.A., red.; YAREMENKO, N.Ye., red.; PARTSEVSKIY, V.N., red. izd-va; ATTOPOVICH, M.K., tekhn. red.

[Standard safety regulations for blasting operations] Edinye pravila bezopasnosti pri vzryvnykh rabotakh. Izd. 2. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1958. 318 p. (MIRA 13:1)

1. Russia (1923- U.S.S.R.) Komitet po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru. (Mining engineering---Safety measures)

KUPALOV-YAROPOLK, I.K.

Geophysical prospecting method for solving engineering problems
in offshore operations. Razved. i prom. geofiz. no.22:98-112 '58.

(MIRA 11:8)

(Prospecting--Geophysical methods) (Oil well drilling, Submarine)

SOV-132-58-9-14/18

AUTHORS: Shirokov, A.S.; Kupalov Yaropolk, I.K., and Komarov, I.S.

TITLE: The XXII Congress of the German Geophysical Society (XXII S"yezd Germanskogo geofizicheskogo obshchestva)

PERIODICAL: Razvedka i okhrana nedr, 1958,²³ Nr 9, pp 52-54 (USSR)

ABSTRACT: The above mentioned conference took place in Leipzig in May 1958. The authors, who represented the USSR, give a report on the activities of the conference.

ASSOCIATIONS: 1) Ministerstvo geologii i okhrany nedr SSSR (Ministry of Geology and Conservation of Mineral Resources of the USSR)
2) Gosplan SSSR (Gosplan of the USSR)
3) VNII-geofizika (VNII - Geophysics).

1. Geophysics--Germany

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3(a)

SOV, 9-59-2-15/16

AUTHORS: Alekseyev, F., Kupalov-Yaropolk, I., and Lyapunova, N.

TITLE: A Formal Approach to Problems on the Efficiency of Geophysical Prospecting for Oil and Gas (Formal'nyy podkhod k voprosam effektivnosti geofizicheskikh rabot na نفت' i gaz)

PERIODICAL: Geologiya nefiti i gaza, 1959, Nr 2, pp 68-71 (USSR)

ABSTRACT: This is a critical review of a book by P.T. Kozlov named "The Development of Geophysical Prospecting Methods in USSR Oil Industry", published by the GOSINTI Publishing House in 1957.

Card 1/1

KUPALOV-YAROPOLK, I.K.

Geophysical methods used in oil prospecting in foreign countries.
Geol. nefti i gaza 3 no.9:58-61 S '59. (MIRA 13:1)
(Prospecting--Geophysical methods)

KUPALOV-YAROPOLK, I.K.

Use of geophysical methods of oil prospecting in Asiatic countries.
Geol. nefti i gaza 4 no.8:52-56 Ag '60. (MIRA 13:8)
(Asia--Prospecting--Geophysical methods)

KUPALOV-YAROPOLK, I.K.[translator]; PETUKHOV, A.S., red.

[Collected translations; novelties in geophysical instrument design] Sbornik perevodov; novinki geofizicheskogo priborostroeniia. Moskva, 1962. 23 p. (MIRA 17:4)

1. Moscow. Institut tekhnicheskoy informatsii i ekonomicheskikh issledovaniy po neftyanoy i gazovoy promyshlennosti.

KUPALOV-YAROPOLK, I.K.

Drilling blastholes for seismic prospecting abroad. Razved. i prom.
geofiz. no.46:34-44 '62. (MIRA 16:3)

(Boring)

KUPALOV-YAROPOLK, Igor' Konstantinovich; PETUKHOV, Aleksandr
Sergeyevich; KUZ'MINA, N.I., ved. red.

[English-Russian geological and geophysical dictionary]
Anglo-russkii geologo-geofizicheskii slovar'. Moskva,
Nedra, 1964. 530 p. (MIRA 18:1)

ACC NR: AM6033432

(A)

Monograph

UR/

Lovlya, Sergey Aleksandrovich; Kaplan, Berta L'vovna; Mayorov, Viktor Vasil'yevich; Kupalov-YAropolk, Igor' Konstantinovich

Blasting; blasting operations in prospecting geophysics (Vzryvnoye delo; vzryvnyye raboty v razvedochnoy geofizike) Moscow, Izd-vo "Nedra," 1966. 204 p. illus., biblio. Errata slip inserted. 4500 copies printed. Textbook for students of geophysics at petroleum institutes.

TOPIC TAGS: geophysics, geophysical prospecting, blasting operation, shock wave

PURPOSE AND COVERAGE: This book is intended for students of geophysical institutes for studies of oil exploration; it may also be useful to engineers-geophysicists. The authors outline the fundamental principles of the theory of explosive materials and of the effect of explosions in a medium. The blasting methods used in seismic prospecting are analyzed and the techniques of operations and the explosives used are described. The authors also describe methods and apparatus for the use of explosives in eliminating borehole stoppages and the removal of strata.

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UDC: 622.235(071.1)

ACC NR: AM6033432

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Ch. II. Explosive materials and the blasting techniques -- 49

Ch. III. Shock waves and the effects of blasting in various media -- 67

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the blast -- 107

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SUB CODE: 08, 11/ SUBM DATE: 05May66/ ORIG REF: 008/

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KUPALOV-YAROPOLK, K. K.

Kupalov-yaropolk, K. K. "Automatic welding in the production of metallic structures (Experience of the Main Steel Structure Administration of the Ministry of Heavy Industrial Plant Construction)", Trudy Vsesoyuz. konf-tsii po avtomat. svarke pod flyuzom, 3-6 October 1947, Kiev, 1948, p. 26-28.

SO: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 11, 1949).

66238

SOV/126-8-3-23/33

18.1141

AUTHORS: Al'tgauzen, O.N. and Kupalova, I.K.

TITLE: Temperature Dependence of the Magnetic Properties of the Alloy Yul6 (Alfenol)

PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 8, Nr 3, pp 459-461 (USSR)

ABSTRACT: In the present work the result of a study of magnetization curves of the alloy Yul6 at temperatures between -78 and 300°C are given. The iron-aluminium alloy Yul6 with an aluminium content of 16 wt % is a magnetically soft material. The experimental alloy was made in a high frequency furnace, subjected to hot, followed by warm, rolling down to a thickness of 0.35 mm. From the strip obtained rings were stamped out which were then put together in packets and heat treated. The magnetic measurements were taken by a ballistic method. In Fig 1 to 3 and in the table on p 459, the magnetic properties of this alloy at various temperatures are indicated. The magnetic properties of the alloy depend essentially on temperature. On cooling to -78°C and heating to 200°C , the maximum permeability in both cases decreases practically reversibly and on heating to

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SOV/126-8-3-23/33

Temperature Dependence of the Magnetic Properties of the Alloy Yul6
(Alfenol)

255 to 300°C and subsequent cooling, the change is irreversible - the maximum permeability does not attain the original value. The coercive force remains practically unchanged in the temperature range of -78 to 200°C and at higher temperatures it increases irreversibly. The irreversible change in magnetic properties appears to be associated with the commencement of a hardening process (Ref 3) and limits the possibility of its application at temperatures above 200°C. Some stabilization of properties can be obtained by changing the heat treatment (specimen Nr 2) in such a manner that partial hardening should occur during this process, which somewhat lowers the level of properties of the alloy but raises its temperature stability on heating to 100 to 200°C. There are 3 figures, 1 table and 3 references, 2 of which are Soviet and 1 Polish.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii (Central Scientific Research Institute for
Card 2/3

4

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SOV/126-8-3-23/33

Temperature Dependence of the Magnetic Properties of the Alloy Yul6
(Alfenol)

Ferrous Metallurgy)

SUBMITTED: September 13, 1958

Card 3/3



S/126/62/014/004/007/017
E073/E535

AUTHOR: Kupalova, I.K.

TITLE: Study of the possibility of magnetic quality control of the process of hardening and tempering of some tool steels

PERIODICAL: Fizika metallov i metallovedeniye, v.14, no.4, 1962, 529-534

TEXT: The results are described of systematic investigations in which the coercive force, the maximum permeability, the remanence, the saturation magnetization and hardness, as well as the quantity of residual austenite were measured for the tool steels X6BΦ (Kh6VF), X17C6Φ (KhGSVF), Y11X2 (U11KhV) and

	Composition, %								
	C	Cr	Mn	W	V	Si	S	Ni	P
KhGSVF	0.95	0.77	0.89	0.85	0.15	0.79	-	-	-
U11KhV	1.05	0.40	-	0.84	-	-	-	-	-
Kh6VF	1.07	6.06	0.37	1.26	0.64	0.31	0.011	0.26	0.02

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Study of the possibility of ...

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E073/E535

This was done for the purpose of determining the possibilities of utilising magnetic parameters for quality control of these steels in the annealed, quenched and tempered states. It was found that for the steel KhGSVF none of the measured magnetic characteristics changes sufficiently for the hardening temperature range 825-900°C and, therefore, this method cannot be used for controlling the quality of hardening of this steel. However, the permeability μ_{\max} increases considerably with increasing tempering temperature from 100 to 225°C and, therefore, this parameter can be applied for controlling the quality of tempering. For the steel U11KhV the values of B_r and $4\pi I_s$ change by 10 to 35% when changing the hardening temperature, in the range 825-900°C, by 40°C and, consequently, these parameters can be applied for quality control of the hardening of this steel; the coercive force and the maximum permeability change by 25 to 40% on increasing the tempering temperature from 130 to 210°C and can thus be used for controlling the quality of this tempering. For the steel Kh6VF the values of μ_{\max} , B_r and $4\pi I_s$ change by 70-90% as a result of increasing the hardening temperature from 950 to 1150°C, the

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E073/E535

coercive force changes by 25-45% on increasing the tempering temperature from 150 to 300°C (for specimens quenched from a temperature below 950°C), H_{T1} changes by 40-70% on increasing the tempering temperature from 450 to 600°C (if hardening was from a temperature above 1000°C), the remanence and the maximum permeability change by 30-40% as a result of increasing the tempering temperature from 400 to 600°C (for specimens hardened from temperatures above 1000°C). Consequently, the enumerated characteristics can be utilised for controlling the quality of the heat treatment. The investigations also confirmed the possibility of using austenometers for controlling the quality of tempering of components made of the steels investigated. There are 4 figures and 2 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut (All Union Tool Scientific Research Institute)

SUBMITTED: July 25, 1961 (initially)
November 27, 1961 (after revision)

Card 3/3

KUPALOVA, I.K.; LANDA, V.A.

Control of the heat treatment of parts made of high-speed steel
by a coercive-force meter of the UFAN system. Zav.lab. 28
no.11:1347-1349 '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy
institut.

(Steel--Heat treatment)

CHIZAYEV, A.P.; KUPALOVA, I.K.; LANDA, V.A.

Methods for and results of the phase analysis of high-speed
steels. Zav.lab. 31 no.3:298-318 '65.

(Pina 16:12)

L 21022-66 ENT(d)/ENT(m)/ENT(w)/ENA(d)/ENT(v)/T/ENT(t)/ENT(k)/ENT(h)/ENT(l)
IJP(c) JD/BA/JG

ACCESSION NR: AP5022582

UR/0129/65/000/009/0049/0053
669.14.018.25:669.25

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B

AUTHOR: Kupalova, I. K.

TITLE: Effect of cobalt on the structure and properties of high-speed steel

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 9, 1965, 49-53

TOPIC TAGS: cobalt, high speed steel, cobalt steel, phase composition, carbide phase, magnetic property, lattice parameter, hardness

ABSTRACT: Despite the numerous studies of high-speed cobalt steels many aspects of these steels still remain unclarified. To fill this gap, the author investigated the effect of cobalt on the phase composition, structure, and magnetic and physical properties of standard high-speed steels containing 5.5 to 9.7% Co, following their annealing, quenching from 1240°C and tempering at 500-700°C for 0.5-100 hr. Phase composition was determined by means of electrolysis, while the lattice parameters of the carbides and solid solution were determined by means of an URS-50I apparatus with a Geiger-Mueller counter (Fig. 1). It was found that in annealed steel only 3.5% of its cobalt content is present in the carbides.

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ACCESSION NR: AP5022582

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the remainder being present in the solid solution, and the cobalt hardly affects the distribution of W, V, and Cr between the carbides and the solid solution. In hardened steel the cobalt does not affect the amount of the carbide phase, the ratio between the phases MC and M_6C in the carbides, the composition of solid solution with respect to W, V, and Cr, the lattice parameters of the carbide MC, and hardness; on the other hand, Co increases the amount of residual austenite, electric resistivity, and coercive force, and reduces insignificantly the lattice parameters of the carbide M_6C and solid solution, maximum magnetic permeability, and residual magnetic induction. The hardness of steels with cobalt following tempering at 500-700°C is always higher than that of the cobalt-free high-speed steel R9. Cobalt and vanadium enhance the cutting properties of high-speed steels; a comparison of the structure and properties of the cobalt steels R9K5 and R9K10 and high-vanadium steels R9F5 and R10K5F5 with those of the cobalt-free steel R9, however, indicates that the mechanisms of action of Co and V differ (in V this is associated with an increase in C content). The enhancement of cutting properties and red hardness on increasing the V content (steel R9F5) may be attributed to the higher content of the high-disperse carbides MC, whereas the high cutting properties and red hardness of cobalt-containing high-speed steels are conditioned by the presence of cobalt in the solid solution and the change in the properties of this solution: the strengthening of interatomic bonds and

Cord 2/3

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ACCESSION NR: AP5022582

the retardation of diffusion processes. Orig. art. has: 3 figures, 3 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut
(All-Union Scientific Research Institute of Tools)

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, SS

NO REF SOV: 009

OTHER: 000

Card

3/3

BK

KHAIYAN, S. D., Engr.
Electr. engineering

Dissertation: "An Electromagnetic Field in the Presence of Conductors."
Cand Tech Sci, Moscow Electrical Engineering Inst of Communications, 1 Apr '54.
(Vechernyaya Moskva Moscow, 18 Mar '54)

SO: SUM 213, 20 Sep 1954

KUPALYAN, S.D., kandidat tekhnicheskikh nauk.

Skin effect in a bus bar of rectangular cross section. Trudy MAI
no.66:55-61 '56. (MLBA 9:11)
(Electric bus bars)

PHASE I BOOK EXPLOITATION SOV/1175

Govorkov, Vladimir Aleksandrovich and Kupalyan, Stepan Davydovich

Teoriya elektromagnitnogo polya v uprazhneniyakh i zadachakh (Electromagnetic Field Theory in Exercises and Problems) Moscow, Izd-vo "Sovetskoye radio," 1957. 339 p. No. of copies printed not given.

Ed.: Masharova, V.G.; Tech. Ed.: Koruzev, N.N.

PURPOSE: This book is intended for students of vuzes studying the electromagnetic field theory and for specialists conducting calculations on electric and magnetic fields.

COVERAGE: The book comprises over 400 exercises, problems and tests on electromagnetic field theory at the level studied in radio engineering vuzes. The authors claim that some exercises are published for the first time, namely the exercises on: approximate calculation of fields, application of the relaxation method and the method of constructing the field pattern for calculating stationary and alternating fields. The authors have paid special attention to graphi-

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SOV/1175

Electromagnetic Field Theory (Cont.)

cal construction of electric and magnetic field patterns. Chapters 1 through 6 were written by S.D. Kupalyan, and Chapters 7 through 9 by V.A. Govorkov. The authors thank Docent M.R. Shebes for his help. There are 15 references, of which 9 are Soviet and 6 English.

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AVAILABLE: Library of Congress

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2-24-59

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KUPALYAN, S. D.

PHASE I BOOK EXPLOITATION SOV/3622

Moscow. Aviatsionnyy institut imeni Sergo Ordzhonikidze. Kafedra teoreticheskoy elektrotekhniki

Sbornik zadach po teoreticheskim osnovam elektrotekhniki (Collection of Problems on Theoretical Fundamentals of Electrical Engineering) Moscow, Oborongiz, 1959. 124 p. 14,000 copies printed. Errata slip inserted.

Additional Sponsoring Agency: RSFSR. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya.

Ed. V.N. Istratov, Candidate of Technical Sciences, and S.D. Kupalyan, Candidate of Technical Sciences; Managing Ed.: A.S. Zaymovskaya, Engineer; Ed. of Publishing House: S.D. Antonova; Tech. Ed.: I.M. Zudakin.

PURPOSE: This collection of problems is intended for students in electromechanical, electrical engineering, and radio engineering departments of schools of higher technical education. It may also be used by technical personnel who desire to improve their

Card 1/4

Collection of Problems (Cont.)

SOV/3622

technical qualifications in the field of calculating electric circuits.

COVERAGE: This collection contains several problems related to basic subjects of the theory of circuits according to the program of the course on theoretical principles of electrical engineering. Some typical problems with detailed solutions are given. Conventional symbols and terminology used in the book comply with those adopted in two books by G.I. Atabekov: "Garmonicheskiy analiz i operatornyy metod" (Harmonic Analysis and Operational Method), Oborongiz, 1956; and "Lineynyye elektricheskiye tsepi" (Linear Electrical Circuits), Oborongiz, 1957. Chapters 1 and 2 were prepared by N.V. Uspenskaya; chapter 3 by V.N. Istratov; chapters 4 and 7 by S.N. Dmitriyev; chapter 5 by M.G. Surov; chapter 6 and the Appendix by O.M. Bogatyrev; chapter 8 by S.D. Kupalyan; chapter 9 by A.V. Kamenskiy; chapter 10 by A.B. Timofeyev; and chapter 11 by S.S. Khukhrikov. The authors thank Professor G.I. Atabekov for his help. There are no references.

Card 2/4

NEYMAN, Leonid Robertovich; DEMIRCHYAN, Kamo Seropovich; POLIVANOV, K.M.,
prof., retsenzent; FRADKIN, B.M., dots., retsenzent; ~~KUPALYAN, ---~~
S.D., dots., retsenzent; PERKOVSKAYA, G.Ye., red.; MURASHOVA,
V.A., tekhn. red.

[Laboratory manual on electromagnetic fields] Rukovodstvo k la-
boratorii elektromagnitnogo polia. Moskva, Gos. izd-vo "Vysshiaia
shkola," 1961. 219 p. (MIRA 15:4)

(Electric engineering--Handbooks, manuals, etc.)
(Electric fields) (Magnetic fields)

KUPALYAN, Stepan Davidovich; LOMONOSOV, V.Yu., prof., retsenezent;
STOLOV, L.I., dots., retsenezent; ATABEKOV, G.I., red.;
BYCHKOV, D.V., dots., red.; FRIDKIN, L.M., tekhn. red.

[Theoretical principles of electrical engineering in three
parts] Teoreticheskie osnovy elektrotekhniki [v trekh
chastiakh]. Moskva, Gosenergoizdat. Pt.3. [Electromagnetic
field] Elektromagnitnoe pole. 1963. 110 p.

(MIRA 16:12)

(Electric engineering) (Electromagnetic fields)

GOVORKOV, Vladimir Aleksandrovich; KUPALYAN, Stepan Davidovich;
PERKOVSKAYA, G.Ye., red.; GOROKHOVA, S.S., tekhn. red.

[Electromagnetic field theory in exercises and problems]
Teoriia elektromagnitnogo polia v uprazhneniakh i zadachakh. Izd.2., perer. i dop. Moskva, Vysshaya shkola, 1963. 370 p. (MIRA 17:4)

KUPAN, S.

Short summary of results of new experiments in Rumania related to production of aluminum. p. 515.

Vol 10, no. 12, Dec. 1955. KOMASZATI LAPOK. Budapest, Hungary.

So: - Eastern European Accession. Vol 5, no. 4, April 1956

3(5) *Kuparadze, D.I.* PHASE I BOOK EXPLOITATION SOV/2505

Akademiya nauk Gruzinskoy SSR. Sovet po izucheniyu proizvoditel'nykh sil

Prirodnyye resursy Gruzinskoy SSR. t. 2: Nemetallicheskiye poleznyye iskopayemye (Natural Resources of the Georgian Soviet Socialist Republic. v. 2: Nonmetallic Mineral Deposits) Moscow, Izd-vo AN SSSR, 1959. 379 p. Errata slip inserted. 5,500 copies printed.

Ed.: F.N. Tavadze, Corresponding Member, Gruzinskoy SSR Academy of Sciences; Ed. of Publishing House: K.M. Feodot'yev; Tech. Ed.: A.P. Guseva; Editorial Board: R.I. Agladze, Sh. R. Archvadze, N.D. Vachnadze, G.G. Gvelesiani, B.I. Gudzhedzhiani, A.I. Dzhanelidze, G.S. Dzotsenidze, S.V. Durmishidze, N.N. Ketskhoveli, I.S. Mikeladze, M.M. Rubinshteyn, A.A. Tvalchrelidze (Deceased), G.V. Tsitsishvili, and P.G. Shengeliya.

PURPOSE: This book is intended for economic geologists and mineralogists.

COVERAGE: This collection of articles describes the nonmetallic mineral deposits of the Gruzinskaya SSR and the extent to which they

Card 1/13

Natural Resources of the Georgian Soviet (Cont.)

SOV/2505

have been exploited. Individual articles discuss the importance of barite, diatomite, talc, andesite, and other minerals to the chemical industry; of barite, gumbrine, and bentonitic clays to the petroleum industry; and of marble, slate, and limestones to the construction industry. A map depicting the major nonmetallic mineral deposits is included with the work. No personalities are mentioned. References accompany each article.

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